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Francois Sittler

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EXAMINER

REGO, DOMINIC E

ART UNIT

PAPER NUMBER

2618

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/582,200

Applicant(s)

SITTLER ET AL.

Examiner

DOMINIC E. REGO

Art Unit

2618

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-9,11-15 and 17-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-9,11-15 and 17-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/28/2008 has been entered.
2. This communication is responsive to the application filed on November 28, 2008. Claims 1, 3-9, 11-15, and 17-19 are pending and presented for prosecution. Claims 1 and 15 have been amended.

Claim Objections

3. Claim 3 is objected to because of the following informalities: Claim 3 should depend on claim 1, not cancelled claim 2. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1,3, and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henriksson (US 2005/0052341) in view of Ella et al. (US Patent #6,751,470), and further in view of King et al. (US Patent #6,415,158).

Regarding claim 1, Henriksson teaches a radiocommunications device capable of operating on at least two transmission frequency bands and at least two reception frequency bands of a first predetermined standard, the device comprising: first means for implementing communications according to a first predetermined standard, and second means for implementing communications according to a second predetermined standard (Paragraph 0041) except for at least partially using at least one of said frequency bands, wherein the second predetermined standard comprises a walkie-talkie standard and the second communications implementation means use the same frequency band for transmission and reception.

However, in related art, Ella teaches at least partially using at least one of said frequency bands (*Col 1, lines 12-65, especially lines 41-55, Ella teaches in a mobile phone that is capable of operating in both PCS1900 and DCS 1800 bands, the PCS1900 Tx frequencies (1850-1910 MHz) and the DCS1800 Rx frequencies (1805-1880 MHz) overlap in the frequency range of 1850-1880 MHz. In the front-end design such as that shown in FIG. 1, the isolation between PCS 1900 Tx and DCS 1800 Rx components is only about 20 to 30 dB*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the above teaching of Ella to Henriksson for improving the isolation in an antenna system to add diodes or transistors to the Rx lines of the problematic Rx paths when the transmission frequency band and the receiving band overlap due to cross-talk (See Ella, Col 2, lines 18-40).

The combination of Henriksson and Ella fail to teach wherein the second predetermined standard comprises a walkie-talkie standard and the second communications implementation means use the same frequency band for transmission and reception.

However, in related art, King teaches wherein the second predetermined standard comprises a walkie-talkie standard and the second communications implementation means use the same frequency band for transmission and reception (*Col 4, lines 29-45: King teaches illustrated in FIG. 4, the mobile further includes a push-to-talk (PTT) button 28 which the user presses to transmit during the W-T mode. In contrast to frequency division duplexing which allows a user to speak and listen simultaneously, two-way radio communication typically transmits and receives at the same frequency, thus restricting the user to either speaking or listening at a give time (i.e., time-division duplexing). Therefore, in a manner discussed below, the dual mode mobile either transmits or receives during W-T mode depending on whether the user is pressing the PTT button 28).*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the above teaching of King to Henriksson and Ella so

that user can speak and listen simultaneously, Thus restricting the user to either speaking or listening at the same time (King, Col 4, lines 35-45).

Regarding claim 3, the combination of Henriksson, Ella, and King teach all the claimed elements in claim 1. In addition, king teaches the radiocommunications device, wherein said same frequency band used for transmission and reception is chosen so as to include a portion in which said device is capable of transmitting according to said first standard and a portion in which it is capable of receiving according to said first standard (Col 4, lines 29-45).

Regarding claim 11, the combination of Henriksson, Ella, and King teach all the claimed elements in claim 1. In addition, Henriksson teaches the radiocommunications device, wherein said transmission frequency bands are 825-849 MHz and 880-915 MHz, and said reception frequency bands are 869- 894 MHz and 925-960 MHz (Paragraph 0041).

Regarding claim 12, the combination of Henriksson, Ella, and King teach all the claimed elements in claim 11. In addition, Henriksson teaches the radiocommunications device, wherein the frequency band used by said second communications implementation means is 868-870 MHz, for transmission and reception (Paragraph 0041).

Regarding claim 13, the combination of Henriksson, Ella, and King teach all the claimed elements in claim 11. In addition, Henriksson teaches the radiocommunications device, wherein the frequency band used by said second communications

implementation means is 9902-928 MHz, for transmission and reception (Paragraph 0041).

Regarding claim 14, the combination of Henriksson, Ella, and King teach all the claimed elements in claim 1. In addition, Henriksson teaches the radiocommunications device, wherein it includes user-system interface elements specific to the implementation of communications according to said second standard (This is inherent in dual mode or multimode mobile terminal. Also see Henriksson, Paragraph 0041).

Regarding claim 15, Henriksson teaches a radiocommunications device comprising:

at least two transmission frequency bands and at least two reception frequency bands of a first predetermined standard; a single antenna; and a shared digital processor, which implements communications through the single antenna according to a first predetermined standard and implements communications through the single antenna according to a second predetermined standard (Paragraphs 0039-0041) except for at least partially using at least one of said frequency bands, wherein the second predetermined standard comprises a walkie-talkie standard and the shared digital processor uses the same frequency band for transmission and reception to implement communications according to the second predetermined standard, and wherein the same frequency band is chosen so as to include a portion in which the device is capable of transmitting according to the first standard and a portion in which the device is capable of receiving according to the first standard.

However, in related art, Ella teaches at least partially using at least one of said frequency bands (*Col 1, lines 12-65, especially lines 41-55, Ella teaches in a mobile phone that is capable of operating in both PCS1900 and DCS 1800 bands, the PCS1900 Tx frequencies (1850-1910 MHz) and the DCS1800 Rx frequencies (1805-1880 MHz) overlap in the frequency range of 1850-1880 MHz. In the front-end design such as that shown in FIG. 1, the isolation between PCS 1900 Tx and DCS 1800 Rx components is only about 20 to 30 dB*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the above teaching of Ella to Henriksson for improving the isolation in an antenna system to add diodes or transistors to the Rx lines of the problematic Rx paths when the transmission frequency band and the receiving band overlap due to cross-talk (See Ella, Col 2, lines 18-40).

The combination of Henriksson and Ella fail to teach wherein the second predetermined standard comprises a walkie-talkie standard and the shared digital processor uses the same frequency band for transmission and reception to implement communications according to the second predetermined standard, and wherein the same frequency band is chosen so as to include a portion in which the device is capable of transmitting according to the first standard and a portion in which the device is capable of receiving according to the first standard.

However, in related art, King teaches wherein the second predetermined standard comprises a walkie-talkie standard and the shared digital processor uses the same frequency band for transmission and reception to implement communications

according to the second predetermined standard, and wherein the same frequency band is chosen so as to include a portion in which the device is capable of transmitting according to the first standard and a portion in which the device is capable of receiving according to the first standard (*Col 4, lines 29-45: King teaches illustrated in FIG. 4, the mobile further includes a push-to-talk (PTT) button 28 which the user presses to transmit during the W-T mode. In contrast to frequency division duplexing which allows a user to speak and listen simultaneously, two-way radio communication typically transmits and receives at the same frequency, thus restricting the user to either speaking or listening at a give time (i.e., time-division duplexing). Therefore, in a manner discussed below, the dual mode mobile either transmits or receives during W-T mode depending on whether the user is pressing the PTT button 28*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the above teaching of King to Henriksson and Ella so that user can speak and listen simultaneously, Thus restricting the user to either speaking or listening at the same time (King, Col 4, lines 35-45).

6. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henriksson (US 2005/0052341) in view of Ella et al. (US Patent #6,751,470) in view of King et al. (US Patent #6,415,158) and further in view of King et al. (EP 1026908).

Regarding claim 4, the combination of Henriksson and Ella fail to teach the

radiocommunications device wherein said first and second communications implementation means comprise at least some processing means.

However, in related art, King (EP 1026908) teaches the radiocommunications device wherein said first and second communications implementation means comprise at least some processing means (Paragraphs 0011-0016).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the above teaching of King (EP 1026908) to Henriksson, Ella, and King (US 6,751,470), in order to process the encoded audio bit stream (King, Paragraph 0011).

Regarding claim 5, the combination of Henriksson, Ella, King (US 6,751,470) and King (EP 1026908) teach all the claimed elements in claim 4. In addition, King (EP 1026908) teaches the radiocommunications device, wherein said shared processing means belong to the group including: digital processing means; filtering means; amplification means; and modulation and/or demodulation means (Paragraphs 0011-0016).

7. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henriksson (US 2005/0052341) in view of Ella et al. (US Patent #6,751,470) in view of King et al. (US Patent #6,415,158) in view of King et al. (EP 1026908) and further in view of Connor (US 2004/0203353).

Regarding claim 6, the combination of Henriksson, Ella, King (US 6,751,470) and King (EP 1026908) fail to teach the radiocommunications device, wherein, said shared processing means include digital processing means and storage means, containing data for command and control of said digital processing means, according to said first standard and according to said second standard.

However, in related art, Connor teaches the radiocommunications device, wherein, said shared processing means include digital processing means and storage means, containing data for command and control of said digital processing means, according to said first standard and according to said second standard (Paragraph 0013).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the above teaching of Connor to Henriksson, Ella, King (US 6,751,470) and King (EP 1026908), in order to process the encoded audio bit stream.

Regarding claim 7, the combination of Henriksson, Ella, King (US 6,751,470), King (EP 1026908), and Connor teach all the claimed element in claim 6. In addition, both King and Connor teach the radiocommunications device, wherein said command and control data for said second standard of implement digital communications (See King, Paragraph 0037 and Connor, Paragraph 0013).

Regarding claim 8, the combination of Henriksson, Ella, King (US 6,751,470), King (EP 1026908), and Connor teach all the claimed element in claim 6. In addition, both King and Connor teach the radiocommunications device, wherein said command

and control data for said second standard of simulate analog communications (See King, Paragraph 0037 and Connor, Paragraph 0013).

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Henriksson (US 2005/0052341) in view of Ella et al. (US Patent #6,751,470) in view of King (US 6,751,470) and further in view of Segal (US Patent #7,031,280).

Regarding claim 9, the combination of Henriksson, Ella, and King fail to teach the radiocommunications device, wherein said first predetermined standard belongs to the group including GSM, GPRS and UMTS.

However, in related art, Segal also teaches the radiocommunications device, wherein said first predetermined standard belongs to the group including GSM, GPRS and UMTS (Col 2, line 48-Col 3, line 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the above teaching of Segal to Henriksson, Ella, and King in order to provide or facilitate voice communication services or data or messaging services over cellular wide area networks.

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Henriksson (US 2005/0052341) in view of Ella et al. (US Patent #6,751,470) in view of King (US 6,751,470) and further in view of Garcia (US 2005/0146432).

Regarding claim 12, the combination of Henriksson, Ella, and King fail to teach the radiocommunications device, wherein the frequency band used by said second communications implementation means is 868-870 MHz, for transmission and reception (Paragraph 0041).

However, in related art, Garcia also teaches the radiocommunications device, wherein the frequency band used by said second communications implementation means is 868-870 MHz, for transmission and reception (Paragraph 0018).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the above teaching of Garcia to Henriksson, Ella, and King, in order to communicate with other device by using push-to-talk or walkie-talkie or Bluetooth technology with a certain frequency band.

10. Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henriksson (US 2005/0052341) in view of Ella et al. (US Patent #6,751,470) in view of King (US 6,751,470) and in view of Connor (US 2004/0203353).

Regarding claim 17, the combination of Henriksson, Ella, and King fail to teach the radiocommunications device and further comprising: a storage device containing data for command and control data of the digital processor, according to the first standard and according to the second standard.

However, in related art, Connor teaches the radiocommunications device and further comprising: a storage device containing data for command and control data of

the digital processor, according to the first standard and according to the second standard. (Paragraph 0013).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the above teaching of Connor to Henriksson, Ella, and King, in order to process the encoded audio bit stream.

Regarding claim 18, the combination of Henriksson, Ella, King, and Connor teach all the claimed element in claim 17. In addition, Connor teaches the radiocommunications device, wherein the command and control data for said second standard implement digital communications (Paragraph 0013).

Regarding claim 19, the combination of Henriksson, Ella, King, and Connor teach all the claimed element in claim 17. In addition, Connor teaches the radiocommunications device, wherein the command and control data for the second standard simulate analog communications (Paragraph 0013).

Response to Arguments

11. Applicant's arguments with respect to claims 1,3-9, and 11-15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Verbil (US Patent #6,754,583, Col 3, lines 25-49), Ross et al. (US

Patent #6,917,799, Col 1, lines 20-29), Chandler et al. (US Pub. No. 2001/0012776, Para. 0038), Legare et al. (US Pub. No. 2003/0207694, Para. 0015).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOMINIC E. REGO whose telephone number is (571)272-8132. The examiner can normally be reached on Monday-Friday, 8:30 am-5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc M. Nguyen can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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